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EXAMINER LEIBOVICH, YAIR				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,325

Applicant(s)

FITZGERALD, RICHARD COLIN

Examiner

YAIR LEIBOVICH

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/20/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/302)
Paper No(s)/Mail Date 12/20/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract is objected to because of the following informalities: It is not limited to a single paragraph. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 23 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim is directed to a program, per se. The

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body of the claim is directed to the logic steps of the program itself, although, the claim recites memory and computing device, no actual structure of the memory is being recited. Furthermore, no actual implementation of the machine/computer is recited into the claim and no actual execution of the program has been implemented. The claim is basically reciting what program steps a program can do. Therefore, it is treated as a program alone. No explicit definition of "Software" has been set in the specification therefore, "Software" is read as broadly as program alone.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2, 4, 12-13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanRooven (US 6,591,376 B1) in view of Wilks (US 6,944,757 B2).

For Claim 1,

- VanRooven teaches: a portable computing device (see abstract line 3), controlled by an operating system (see abstract lines 2), in which, if the operating system is intact (column 2 lines 16-25, and column 3 lines 8-11) but an internal non-volatile memory drive (see figure 1 element 106 and column 3 line 1) that is used to boot the device (see figure 2 step 204 and column 3 lines 8-9) is found to be corrupted (see column 3 line 12), then the non-volatile memory (figure 1 element 106) is automatically swapped (see figure 2 step 208/202) with a temporary RAM drive (see column 3 line

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9 and column 5 line 30) to enable the operating system to boot (see column 3 line 8-11).

- VanRooven does not teach booting to a functional GUI.
- However, Wilks teaches booting to a functional GUI (see column 2 lines 37-38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanRooven to include booting to a functional GUI, as taught by Wilks, to provide enhanced interface capabilities.

For Claim 2,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- VanRooven does not teach: non-volatile memory is a flash memory.
- However, Wilks teaches non-volatile memory is a flash memory (see figure 1 element 124 and column 6 lines 51-52).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanRooven to include non-volatile memory is a flash memory, as taught by Wilks, to provide enhanced system functionality and flexibility.

For claim 4,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- VanRooven further teaches default configuration files automatically copied to RAM drive (see column 3 lines 8-10).

For Claim 12,

- VanRooven teaches: A method of enabling a portable computing device (see abstract line 3) to boot up (see figure 1 step 124 and abstract lines 2-3), when its resident operating system is intact (column 2 lines 16-25, and column 3 lines 8-11) but an internal non-volatile memory drive (see figure 1 element 106 and column 3 line 1) that is normally used to boot up from (see figure 2 step 204 and column 3 lines 8-9) is found to be corrupt, (see column 3 line 12), comprising the step of automatically swapping (see figure 2 step 208/202) the corrupt non-volatile memory drive (figure 1 element 106, 108) with a temporary RAM drive (see column 3 line 9 and column 5 line 30) to enable the resident operating system to boot (see column 3 line 8-11).
- VanRooven does not teach booting to a functional GUI.
- However, Wilks teaches booting to a functional GUI (see column 2 lines 37-38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanRooven to include booting to a functional GUI, as taught by Wilks, to provide enhanced interface capabilities.

For Claim 13,

- The combination of VanRooven and Wilks teaches the limitations of claim 12 for the reasons above.
- VanRooven does not teach: non-volatile memory is a flash memory.
- However, Wilks teaches non-volatile memory is a flash memory (see figure 1 element 124 and column 6 lines 51-52).

- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanRooven to include non-volatile memory is a flash memory, as taught by Wilks, to provide enhanced system functionality and flexibility.

For claim 15,

- The combination of VanRooven and Wilks teaches the limitations of claim 12 for the reasons above.
- VanRooven further teaches default configuration files automatically copied to RAM drive (see column 3 lines 8-10).

8. Claims 3, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of VanRooven (US 6,591,376 B1) and Wilks (US 6,944,757 B2), as applied to claims 1, and 12 respectively above, and further in view of Suprunov (US 6,421,009 B2).

For claim 3,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach temporary RAM drive allows at least emergency voice calls to be made.
- However, Suprunov teaches temporary RAM drive (see column 4 line 38) allows at least emergency voice calls (see column 4 line 39-40) to be made (see column 4 line 39).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks so that the temporary

RAM drive allows at least emergency voice calls to be made as taught by Suprunov, to provide enhanced minimum functionality under faulty conditions.

For claim 14,

- The combination of VanRooven and Wilks teaches the limitations of claim 12 for the reasons above.
 - The combination of VanRooven and Wilks does not teach temporary RAM drive allows at least emergency voice calls to be made.
 - However, Suprunov teaches temporary RAM drive (see column 4 line 38) allows at least emergency voice calls (see column 4 line 39-40) to be made (see column 4 line 39).
 - It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks so that the temporary RAM drive allows at least emergency voice calls to be made as taught by Suprunov, to provide enhanced minimum functionality under faulty conditions.
9. Claims 5-6, 16-17, 11, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of VanRooven (US 6,591,376 B1) and Wilks (US 6,944,757 B2), as applied to claims 1, and 12 respectively above, and further in view of Maffezzoni (US 6,532,535 B1).

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For Claim 5,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach corrupt drive is automatically moved to a different drive letter to allow subsequent reformatting.
- However, Maffezzoni teaches corrupt drive (column 39 line 64) is automatically moved to a different drive letter to allow subsequent reformatting (Column 39 line 62 through column 40 line 44, and column 39 table 19 lines 24-42).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include corrupt drive is automatically moved to a different drive letter to allow subsequent reformatting, as taught by Maffezzoni, to improve reliability and compatibility of formatting.

For Claim 6,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification asking if reformatting should take place.
- However, Maffezzoni teaches device (column 3 line 40) displays a user notification asking (column 43 lines 43-44) if reformatting should take place (Figure 8 step 466, and Column 43 lines 44-45).

- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays a user notification asking if reformatting should take place as taught by Maffezzoni, to avoid unnecessary loss of data, and to improve recover capabilities.

For Claim 11,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach internal non-volatile memory drive is found to be corrupted if any of the following apply: (a) existing data cannot be read; (b) new data cannot be written; (c) user data is corrupt but metadata is not corrupt; (d) user data is not corrupt but metadata is corrupt; (e) it is in a read-only state.
- However, Maffezzoni teaches internal non-volatile memory drive is found to be corrupted if: (d) user data is not corrupt but metadata is corrupt (column 39 lines 53-57).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include internal non-volatile memory drive is found to be corrupted if any of the following apply: (a) existing data cannot be read; (b) new data cannot be written; (c) user data is corrupt but metadata is not corrupt; (d) user data is not corrupt but metadata is corrupt; (e) it is in a read-only state, as taught by Maffezzoni, to enhance system recoverability from errors.

For Claim 16,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach corrupt drive is automatically moved to a different drive letter to allow subsequent reformatting.
- However, Maffezzoni teaches corrupt drive is automatically moved to a different drive letter to allow subsequent reformatting. (Column 39 line 62 through column 40 line 44, and column 39 table 19 lines 24-42).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include corrupt drive is automatically moved to a different drive letter to allow subsequent reformatting, as taught by Maffezzoni, to improve reliability and compatibility of formatting.

For Claim 17,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification asking if reformatting should take place.
- However, Maffezzoni teaches device (column 3 line 40) displays a user notification asking (column 43 lines 43-44) if reformatting should take place (Figure 8 step 466, and Column 43 lines 44-45).

- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays a user notification asking if reformatting should take place as taught by Maffezzoni, to avoid unnecessary loss of data, and to improve recover capabilities.

For Claim 22,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach internal non-volatile memory drive is found to be corrupted if any of the following apply: (a) existing data cannot be read; (b) new data cannot be written; (c) user data is corrupt but metadata is not corrupt; (d) user data is not corrupt but metadata is corrupt; (e) it is in a read-only state.
- However, Maffezzoni teaches internal non-volatile memory drive is found to be corrupted if: (d) user data is not corrupt but metadata is corrupt (column 39 lines 53-57).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include internal non-volatile memory drive is found to be corrupted if any of the following apply: (a) existing data cannot be read; (b) new data cannot be written; (c) user data is corrupt but metadata is not corrupt; (d) user data is not corrupt but metadata is corrupt; (e) it

is in a read-only state, as taught by Maffezzoni, to enhance system recoverability from errors.

10. Claims 7-9, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of VanRooven (US 6,591,376 B1) and Wilks (US 6,944,757 B2), as applied to claims 1 and 12 respectively above, and in further view of Duske (US 6,992,991 B2).

For Claim 7,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification that the temporary RAM drive is in use.
- However, Duske teaches device displays a user notification that the temporary RAM drive is in use (Column 66 line 35, 53, column 17 lines 55-58, and column 26 lines 24-27).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include device displays a user notification that the temporary RAM drive is in use, as taught by Duske, to improve user awareness of faulty conditions.

For Claim 8,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.

- The combination of VanRooven and Wilks does not teach device displays a user notification that save options are disabled.
- However, Duske teaches device displays user notification that save options are disabled (Column 28 line 52 and further in column 45 line 38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays user notification that save options are disabled, as taught by Duske, to improve user awareness of faulty conditions.

For Claim 9.

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification that save options are not available.
- However, Duske teaches device displays user notification that save options are not available (Column 28 line 52 and further in column 45 line 38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays a user notification that save options are not available, as taught by Duske, to improve user awareness of faulty conditions.

For Claim 18.

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.

- The combination of VanRooven and Wilks does not teach device displays a user notification that the temporary RAM drive is in use.
- However, Duske teaches device displays a user notification that the temporary RAM drive is in use (Column 66 line 35, 53, column 17 lines 55-58, and column 26 lines 24-27).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include device displays a user notification that the temporary RAM drive is in use, as taught by Duske, to improve user awareness of faulty conditions.

For Claim 19.

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification that save options are disabled.
- However, Duske teaches device displays user notification that save options are disabled (Column 28 line 52 and further in column 45 line 38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays user notification that save options are disabled, as taught by Duske, to improve user awareness of faulty conditions.

For Claim 20,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification that save options are not available.
- However, Duske teaches device displays user notification that save options are not available (Column 28 line 52 and further in column 45 line 38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays a user notification that save options are not available, as taught by Duske, to improve user awareness of faulty conditions.

11. Claims 10, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of VanRooven (US 6,591,376 B1) and Wilks (US 6,944,757 B2), as applied to claims 1 and 12 respectively above, and in further view of Harris (US 6,853,710 B2).

For Claim 10,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive.

- However, Harris teaches device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive (Column 13 lines 60-64).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive, as taught by Harris, to improve system restorability from faults.

For Claim 21.

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive.
- However, Harris teaches device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive (Column 13 lines 60-64).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive, as taught by Harris, to improve system restorability from faults.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US 2002/0142805 A1 (Pecen et al: Method and Apparatus for Anonymous Network Access in the Absence of a Mobile Subscriber Identity Module).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YAIR LEIBOVICH whose telephone number is (571)270-3796. The examiner can normally be reached on Monday-Thursday 6:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Nguyen can be reached on (571)272-1753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Y.L

/DANIEL PAN/
Primary Examiner